

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau



542555

(43) International Publication Date  
5 August 2004 (05.08.2004)

PCT

(10) International Publication Number  
WO 2004/064742 A2

- (51) International Patent Classification<sup>7</sup>: A61K
- (21) International Application Number:  
PCT/US2004/001298
- (22) International Filing Date: 20 January 2004 (20.01.2004)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:  
60/441,045 17 January 2003 (17.01.2003) US  
60/476,423 3 June 2003 (03.06.2003) US
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GA 30309-3915 (US).
- (81) Designated States (unless otherwise indicated, for every  
kind of national protection available): AE, AG, AL, AM,  
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,  
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,  
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,  
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,  
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,  
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,  
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,  
ZW.
- (84) Designated States (unless otherwise indicated, for every  
kind of regional protection available): ARIPO (BW, GH,  
GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),  
Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), Euro-  
pean (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR,  
GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK,  
TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW,  
ML, MR, NE, SN, TD, TG).
- Published:  
— without international search report and to be republished  
upon receipt of that report
- For two-letter codes and other abbreviations, refer to the "Guid-  
ance Notes on Codes and Abbreviations" appearing at the begin-  
ning of each regular issue of the PCT Gazette.

(54) Title: METHODS AND COMPOSITIONS FOR P2X RECEPTOR CALCIUM ENTRY CHANNELS AND OTHER CAL-  
CIUM ENTRY MECHANISMS

(57) Abstract: This invention relates generally to a method of increasing cytosolic Ca<sup>2+</sup> levels in mammalian cells comprising con-  
tacting P2X receptor Ca<sup>2+</sup> entry channels or any and all other Ca<sup>2+</sup> entry channels or mechanisms on the cell with an effective amount  
of a small molecule, and a composition comprising the small molecule in a delivery system. The invention has broad applicability  
in the pharmaceutical industry as a method of treating airway diseases (such as cystic fibrosis and asthma), ailments of the lung and  
airways (such as those caused by common cold pathogens or allergens in allergy), kidney diseases and renal hypertensive disorders  
(such as polycystic kidney disease and salt-sensitive hypertension syndromes), and endocrine disorders (such as diabetes).

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